

CLAIMS:

Sub  
AI  
1. An activated carbon for electric double layer capacitor whose rate of FS (filling swing) in an  $\alpha_s$ -plot by the nitrogen adsorption method is at most 27 cm<sup>3</sup>/g STP.

5

2. The activated carbon for electric double layer capacitor according to Claim 1, wherein the rate of FS is at most 25 cm<sup>3</sup>/g STP.

10

3. The activated carbon for electric double layer capacitor according to Claim 1, wherein the rate of FS is 10 to 25 cm<sup>3</sup>/g STP.

15

4. The activated carbon for electric double layer capacitor according to Claim 1, wherein the oxygen content at the surface thereof is at most 5%.

20

2. 5. The activated carbon for electric double layer capacitor according to Claim 1, wherein the oxygen content at the surface thereof is lower than 3%.

25

6. The activated carbon for electric double layer capacitor according to Claim 1, wherein the specific surface area is 500 to 5,000 m<sup>2</sup>/g as determined by nitrogen adsorption in accordance with the BET method.

7. The activated carbon for electric double layer

capacitor according to Claim 1, wherein the rate of FS is 10 to 25 cm<sup>3</sup>/g STP, the oxygen content at the surface thereof is 0.1 to 4.5%, and the specific surface area is 1,000 to 2,000 m<sup>2</sup>/g as determined by nitrogen adsorption in accordance with the BET method.

4. 8. The activated carbon for electric double layer capacitor according to Claim 1, which is obtained by carbonizing or activating or carbonizing and activating a carbonaceous raw material by a gas activating method or a chemical activating method.

5. 9. The activated carbon for electric double layer capacitor according to Claim 8, which is obtained by carbonizing and activating a polyvinylidene chloride resin by the chemical activating method making use of zinc chloride.

6. 10. The activated carbon for electric double layer capacitor according to Claim 8, which is obtained by carbonizing and activating coconut shell, petroleum pitch or coal pitch by the gas activating method.

11. An activated carbon electrode formed with an activated carbon whose rate of FS (filling swing) in an  $\alpha_s$ -plot by the nitrogen adsorption method is at most 27 cm<sup>3</sup>/g STP.

8<sub>s</sub> 12. The activated carbon electrode according to Claim 11, which is obtained by shaping a mixture comprising the activated carbon, a conductive material and a binder into an electrode form.

5

13. An electric double layer capacitor equipped with activated carbon electrodes formed with an activated carbon, whose rate of FS (filling swing) in an  $\alpha_s$ -plot by the nitrogen adsorption method is at most 27 cm<sup>3</sup>/g STP, as polarizable electrodes.

10

14. The electric double layer capacitor according to Claim 13, which is obtained by tightly enclosing a structure that a separator is held between 2 polarizable electrodes and the resultant laminate is further held between 2 collecting plates into an electrolytic solution-containing case.

15

11. 15. The electric double layer capacitor according to Claim 14, wherein the electrolytic solution is a nonaqueous solvent type electrolytic solution.

20

12. 16. The electric double layer capacitor according to Claim 13, which exhibits a retention of electrostatic capacity of 80 to 110% at a durability test at a temperature of 70°C and a voltage of 2.5 V for 12 hours.

25

17. The electric double layer capacitor according to Claim 13, which exhibits a retention of resistance of 90 to 125% in the durability test.

5 18. The electric double layer capacitor according to Claim 13, wherein both retention of electrostatic capacity and retention of resistance in the durability test are 95 to 105%.

*add a6*